



Montana Fish, Wildlife & Parks

January 29, 2010
1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
 Fisheries Bureau
 Endangered Species Coordinator
 Native Species Coordinator, Fisheries
 Missoula Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Montana Wildlife Federation
Wayne Hadley, 1016 Eastside Road, Deer Lodge, MT 59722
Montana River Action, 304 N 18th Avenue, Bozeman, MT 59715
North Powell County Conservation District
Big Blackfoot Chapter Trout Unlimited
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Wade Stitt, 1664 Lower Braziel Creek Road, Helmville, MT 59843
Skip Johnson, 587 Cozy Lane, Helmville, MT 59843

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for the Future Fisheries Improvement Program. The Program tentatively plans to provide partial funding for a project calling for the restoration of approximately 1,500 feet of Braziel Creek. The project calls for channel reconstruction, a road crossing upgrade, installation of a fish screen, protection of the riparian corridor, and development of grazing management plans. The intent of the project is to create a fully functioning stream channel that is capable of supporting westslope cutthroat trout. The project site is located approximately 9 miles southeast of the community of Helmville in Powell County.

Please submit any comments that you have by 5:00 P.M., March 3, 2010 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Funding for this project through the Future Fisheries Improvement Program is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432. Please note that this draft EA will be considered as final if no substantive comments are received by the deadline listed above.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Section
Fisheries Bureau
e-mail: mlere@mt.gov

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Braziel Creek Channel Restoration Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purpose of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

The Future Fisheries Program is proposing to provide partial funding to a project designed to restore a 1,500-foot reach of Braziel Creek, a tributary to Nevada Creek in the Blackfoot River drainage. The intent of this project is to provide for a functional stream channel that is capable of supporting westslope cutthroat trout. The project site is located approximately 9 miles southeast of the community of Helmville in Powell County (Attachment 1).

I. Location of Project: This project will be conducted on a 1,500-foot reach of Braziel Creek, a tributary to Nevada Creek, located within Township 12 North, Range 10 West, Section 10 in Powell County.

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six year operations plan for the fisheries program is to “restore and enhance degraded habitats” by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help meet this goal.

Braziel Creek supports a westslope cutthroat trout population that is slightly hybridized with rainbow trout. A 1,500-foot reach of the stream, located on properties owned by Wade Stitt and Skip Johnson, has been degraded in the past through channelization, over-grazing by livestock and the installation of an undersized culvert for a stream crossing. All of these past activities currently are contributing to excessive sedimentation and the lack of functional fish habitat. The goal of this project is to protect and enhance populations of westslope cutthroat trout on a reach of the stream located on private land, while protecting the genetic integrity of the population and preventing the invasion of non-native species.

III. Scope of the Project:

This project calls for restoring a 1,500-foot reach of Braziel Creek by re-constructing the channel to a B-type step-pool system (Rosgen classification), replacing an undersized culvert to improve fish passage and channel function, installation of a fish screen on an irrigation diversion to eliminate entrainment of fish, installation of riparian fencing, planting of riparian shrubs and

trees and implementing grazing management plans (Attachments 2 and 3). The new channel will be constructed using an analog approach whereby design details will match the dimension, pattern and profile of adjacent natural reaches of the stream (Attachment 4). A coanda-style fish screen will be installed on an existing irrigation diversion to prevent the entrainment of fish (Attachment 5) and the existing undersized culvert will be replaced by a 120-inch “eco-arch” culvert to enhance fish passage. Approximately 2,100 feet of 4-strand barbed wire fencing will be installed along the riparian corridor and a well connected to two winter livestock water tanks will be developed to provide for off-channel water. All disturbed areas will be seeded with a native grass mixture and approximately 60 native trees and shrubs will be planted within the riparian corridor. Currently, beaver activity located near the mouth of the stream appears to act as, at least, a partial barrier to pioneering non-native trout. The project calls for managing for beaver in a manner that would maintain the existing dams located near the mouth of the stream in order to maintain a migration barrier.

This project is expected to cost \$57,350.00. Of this total, the Future Fisheries Improvement Program would be contributing up to \$22,600.00. The remaining funding would come from other sources and from in-kind services

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Brazier Creek supports a slightly hybridized population of westslope cutthroat trout (98.5 % westslope genetics), as well as a population of slimy sculpin. Restoring this degraded reach of stream is expected to increase aquatic habitat diversity and enhance existing fish populations. The proposed streamside fencing and the planting of native riparian shrubs and trees are expected to enhance habitat for riparian dependent wildlife.

2. Water quantity, quality and distribution.

Short-term increases in turbidity will occur during project construction. To minimize turbidity, construction of the new channel will be completed in the dry on approximately 800 feet of the channel in locations where the channel will be moved back to the valley bottom. In the other reaches where work will occur in flowing water, construction will be undertaken during periods of base flow. The Department of Environmental Quality will be contacted to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota (318 authorization). A 310 permit (Natural Streambed and Land Preservation Act) will be obtained from the local conservation district and the U.S. Army Corp of Engineers will be contacted to determine the requirements to meet the federal Clean Water Act (404 permit).

3. Geology, soil quality and moisture.

Soils within the footprint of the re-constructed channel would be disturbed during construction (approximately 3 acres), but would be stabilized using coir fabric, re-vegetation efforts that would include seeding and the planting of riparian shrubs and trees, and the installation of riparian fencing.

4. Vegetation cover, quantity and quality.

Vegetation within the footprint of the re-constructed channel would be disturbed during construction. Re-vegetation efforts associated with the new channel construction and the installation of riparian fencing would mitigate for this disturbance.

5. Aesthetics.

Aesthetics would be negatively impacted during project construction due to ground disturbance and the presence of heavy equipment. In the long term, aesthetics would be enhanced by restoring a degraded reach of stream to a healthier and more natural stream environment.

7. Unique, endangered, fragile, or limited environmental resources.

The project is expected to benefit westslope cutthroat trout that utilize this reach of the stream by restoring the diversity of aquatic habitat, improving fish passage and eliminating entrainment of fish into an existing irrigation diversion. To prevent further invasion of non-native rainbow trout and other fish species into the stream, and to protect the genetic integrity of the westslope cutthroat trout population, an attempt would be made to manage beaver in a manner that would maintain the existing dams located near the mouth. These existing dams currently act as migration barriers for upstream migrating fish.

9. Historic and archaeological sites

The proposed project likely will require an individual Army Corp of Engineers 404 permit. Therefore, the State Historic Preservation Office will be contacted to determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

The intent of the project is to improve aquatic habitat diversity within a 1,500-foot reach of Braziel Creek. The project is expected to enhance westslope cutthroat trout. The project site is legally accessible via adjacent Bureau of Land Management lands and through portions of Nevada Creek. Additionally, recruitment of salmonids to Nevada Creek may increase as a result of the project, although attempts will be made to maintain genetic isolation between the two streams. As a result, the recreational fishery on

Nevada Creek and possibly the Blackfoot River may exhibit some improvement.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, this reach of Brazier Creek will remain degraded and a population of westslope cutthroat trout will remain below potential. Water quality will continue to be impaired from excessive sedimentation and associated higher water temperatures. Vegetation within the riparian corridor also will remain deteriorated.

2. Passive Channel Restoration Associated With Changes in Riparian Management

Under this alternative, the vegetation within the riparian corridor would be allowed to recover with the use of riparian fencing and the development of appropriate grazing management plans. Improvements in habitat diversity within the stream channel likely would slowly follow riparian recovery, but would require significantly greater time than the preferred alternative.

2. The Proposed Alternative

The proposed alternative is designed to restore a degraded reach of Brazier Creek to protect and expand the existing population of westslope cutthroat trout. This alternative would increase habitat diversity for fish populations residing in the stream, improve upstream fish passage and eliminate the loss of fish into an existing irrigation diversion. Riparian plantings and the installation of fencing are expected to enhance habitat for riparian dependent wildlife. An attempt would be made to maintain the genetic integrity of the westslope cutthroat trout population by managing beaver in a manner to retain existing dams located near the mouth of the stream.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and funding will be contingent upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on Montana Fish, Wildlife and Parks webpage: fwp.mt.gov.

3. Duration of comment period?

Public comment will be accepted through 5:00 PM on March 3, 2010.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
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Montana Department of Fish, Wildlife and Parks
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Helena, MT 59620
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MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Braziel Creek Channel Restoration Project

Division/Bureau Fisheries Bureau -Future Fisheries Improvement

Description of Project The Future Fisheries Improvement Program is proposing to provide partial funding to a project designed to restore a 1,500-foot reach of Braziel Creek, a tributary to Nevada Creek. The intent of the project is to protect and enhance a population of westslope cutthroat trout. The project site is located approximately 9 miles southeast of the community of Helmville in Powell County.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOW N	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites					X	X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction North Powell Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historic Preservation Office
Individuals or groups contributing to this EA Ryen Aasheim, Big Blackfoot Chapter Trout Unlimited.

Recommendation concerning preparation of EIS No EIS required.

EA prepared by: Mark Lere

Date: January 28, 2008